

Phillips County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

6/28/2017

Using the most recent IMPLAN data available (2015) adjusted for 2017, 18 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Phillips County economy.¹

These 18 sectors have a total direct output of approximately **\$175.8 million** and support **729.6 jobs** in Phillips County. Running the model for all 18 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Phillips County Economy						
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product
Direct Effect	729.6	16.28%	\$50,269,170	16.40%	\$175,771,270	57.36%
Indirect Effect	205.4	4.58%	\$15,334,960	5.00%	\$28,597,806	9.33%
Induced Effect	117.1	2.61%	\$6,453,480	2.11%	\$12,837,779	4.19%
Total Effect	1,052.1	23.48%	\$72,057,609	23.52%	\$217,206,855	70.88%

As shown in the above table, agriculture, food, and food processing sectors support **1,052.1 jobs**, or **23.48%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$217.2 million, roughly 70.88% of the economy.**

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 18 agriculture, food, and food processing sectors is approximately **\$72.1 million**, or **23.52% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **23.52% of the total economy.**

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **319.4 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Phillips County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	319.4	\$64,412,501
Landscape and horticultural services	137.6	\$7,397,180
All other crop farming	67.4	\$8,103,081
Grain farming	59.2	\$34,215,367
Animal production, except cattle and poultry and eggs	54.4	\$10,030,055
Support activities for agriculture and forestry	49.4	\$6,389,389
Farm machinery and equipment manufacturing	43.0	\$27,799,930
Wholesale trade	35.9	\$6,202,587
Truck transportation	22.3	\$3,644,347
Dairy cattle and milk production	21.3	\$7,715,358

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately **\$64.4 million** to the Phillips County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	319.4	\$64,412,501
Grain farming	59.2	\$34,215,367
Farm machinery and equipment manufacturing	43	\$27,799,930
Animal production, except cattle and poultry and eggs	54.4	\$10,030,055
All other crop farming	67.4	\$8,103,081
Oilseed farming	4.3	\$7,887,478
Dairy cattle and milk production	21.3	\$7,715,358
Landscape and horticultural services	137.6	\$7,397,180
Support activities for agriculture and forestry	49.4	\$6,389,389
Wholesale trade	35.9	\$6,202,587

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Phillips County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	4.3	\$7,887,477.40
Grain farming	59.2	\$34,215,366.36
Vegetable and melon farming	0.3	\$70,543.95
Fruit farming	0.6	\$48,275.59
Tree nut farming	0.0	\$23.56
All other crop farming	67.4	\$8,103,080.75
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	319.4	\$64,412,498.47
Dairy cattle and milk production	21.3	\$7,715,357.78
Poultry and egg production	0.7	\$616,635.62
Animal production, except cattle and poultry and eggs	54.4	\$10,030,054.09
Other animal food manufacturing	0.8	\$1,080,838.08
Animal, except poultry, slaughtering	6.9	\$4,759,403.23
Bread and bakery product, except frozen, manufacturing	10.7	\$1,139,170.05
Frozen cakes and other pastries manufacturing	0.2	\$30,486.24
Fiber, yarn, and thread mills	1.0	\$336,603.22
Farm machinery and equipment manufacturing	43.0	\$27,799,930.57
Veterinary services	1.7	\$128,341.05
Landscape and horticultural services	137.6	\$7,397,179.60

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Phillips County, the retail sector was omitted.